

What is claimed is:

1. A method of molding a bearing housing, for axially supporting a motor rotor, having stepped portions midway on an inner peripheral surface of a bearing hole portion, wherein the bearing housing is injection molded from a predetermined resin material, the method comprising the steps of:

providing in a first mold block a first cavity portion for molding a first inner peripheral surface which is molded continuously from an opening of the bearing hole portion;

providing in a second mold block a second cavity portion and a plurality of shape portions, for forming the stepped portions, each of which has an outside diameter greater than an inside diameter of the first inner peripheral surface and extends toward the first mold block, wherein the first cavity portion and the second cavity portion forming a cavity at the time of mold closing is coaxially positioned; and

introducing the predetermined resin material in a molten state into the cavity to effect molding.

2. A motor having a bearing housing obtained by a method as claimed in claim 1.

3. The motor according to claim 2, wherein  
at least one of a metal bearing and a radial ball  
bearing is supported by the plurality of stepped  
portions.

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4. The motor according to claim 3, wherein the stepped  
portion supports both of the metal beating and the ball  
bearing.

10 5. The motor according to claim 3, wherein the metal  
bearing is provided with a recessed portion for escaping  
from the stepped portion.

15 6. The motor according to claim 4, wherein the metal  
bearing is an oil-retaining sintered metal bearing.

7. A mold for molding a bearing housing, for axially  
supporting a motor rotor, having stepped portions molded  
midway on an inner peripheral surface of a bearing hole  
20 portion, wherein the beading housing is injection molded  
from a predetermined resin material, the mold comprising:

a first mold block provided with a first cavity  
portion for molding a first inner peripheral surface  
which is molded continuously from an opening of the  
25 bearing hole portion; and

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a second mold block provided with a second cavity portion and a plurality of shape portions, for forming the stepped portions, each of which has an outside diameter greater than an inside diameter of the first inner peripheral surface and extends toward the first mold block,

wherein the first cavity portion and the second cavity portion forming a cavity at the time of mold closing is coaxially positioned.

8. A motor comprising:

at least one bearing for supporting a motor shaft of a motor rotor;

a housing provided with a bearing hole portion into which the bearing is inserted; and

a stepped portion, for supporting the at least one bearing, which is provided at a part of the inner circumference of the bearing hole portion and has a diameter smaller than an inner diameter of the bearing hole portion.